

MHC-binding epitope of Tek, which isolated peptide can stimulate an immune response.

43. (Amended) An isolated peptide according to claim 42 comprising a single MHC-binding epitope of Tek protein.
44. (Amended) An isolated peptide according to claim 42 comprising two or more MHC-binding epitopes of Tek protein.
45. (Amended) An isolated peptide according to claim 44 wherein the amino acid sequence is such that the said two or more epitopes are contiguous or substantially contiguous.
46. (Amended) An isolated peptide according to claim 44 wherein the amino acid sequence is substantially free of the amino acid sequence that occurs between neighbouring epitopes in the native full-length Tek protein.
47. (Amended) An isolated peptide according to claim 42 wherein said at least one MHC-binding epitope comprises an amino acid sequence which appears within an amino acid sequence region selected from TEK1 (amino acids 55 to 90), TEK2 (amino acids 163 to 176), TEK3 (amino acids 345 to 362), TEK4 (amino acids 427 to 442) and/or TEK5 (amino acids 530 to 542) of the Tek polypeptide as shown in Fig. 1, or a

corresponding region in a variant form of Tek, which is functionally homologous to the region shown in Fig. 1.

48. (Amended) An isolated peptide according to claim 47, wherein said at least one MHC-binding epitope comprises an amino acid sequence having greater than 70% amino acid sequence identity with the amino acid sequence region selected from TEK1, TEK2, TEK3, TEK4 and/or TEK5 of the Tek polypeptide as shown in Figure 1.
49. (Amended) An isolated peptide according to claim 42 which comprises one or more of the epitope sequences Z1, Z2, Z3, Z5, Z6, Z7, Z8, Z9, Z11, Z12 and Z32 as set forth in Tables 1 and 4, and, optionally, at least one of a variant form of said Z epitope sequences which is functionally homologous to a sequence shown in Tables 1 or 4.
50. (Amended) An isolated peptide according to claim 42 which binds HLA-A2 with a stabilisation ratio of 1.3 or greater.
51. (Amended) An isolated peptide according to claim 50 which can stimulate T cell proliferation.
52. (Amended) An isolated peptide according to claim 50 which binds HLA-A2 with a stabilisation ratio of 1.5 or greater.

53. (Amended) An isolated peptide according to claim 50 which binds HLA-A2 with a stabilisation ratio of 2.3.
64. (Amended) A recombinant DNA construct which comprises a nucleic acid sequence encoding a peptide according to claim 42.
65. (Amended) A recombinant DNA construct according to claim 64 which has one or more regulatory sequences for controlling the expression of said peptide.
67. (Amended) A host cell containing and capable of expressing a nucleic acid encoding a peptide according to claim 42.
71. (Amended) An isolated nucleic acid molecule encoding a peptide of claim 42.
72. (Amended) A method of obtaining a nucleic acid molecule encoding a peptide of claim 42, the method including hybridising a probe having a sequence encoding a peptide of Tek regions TEK1 to 5 or a peptide as identified in Tables 1 and 4, or a complementary sequence thereof, to target nucleic acid.
80. (Amended) An isolated peptide according to claim 42, comprising one or more of the epitope sequences Z1, Z2, Z3,

Z5, Z6, Z7, Z8, Z9, Z11, Z12 and Z32, as set forth in Tables 1 and 4, and at least one of a variant form of said Z epitope sequences which is functionally homologous to a sequence shown in Tables 1 or 4.

90. (Amended) A method of preparing a pharmaceutical composition for use as a vaccine to target endothelial cells lining the blood vessels of a tumour, said composition comprising a recombinant DNA construct or virus vector according to claim 64, said method including the step of combining said recombinant DNA construct or virus vector with a pharmaceutically acceptable excipient, carrier, buffer or stabiliser.

Please add new claims 102 and 103 as follows:

102. (New) A recombinant virus vector which comprises a nucleic acid sequence encoding a peptide according to claim 42.
103. (New) A recombinant virus vector according to claim 64 which has one or more regulatory sequences for controlling the expression of said peptide.

Cancel claims 54-63, 68-70, 74, 77-79, 81-89, 91-94 and 96-101 without prejudice to applicants' right to file one or more